

## **REMARKS**

In the Office Action dated January 18, 2007, claims 4, 6, 7, 10-16 and 18 were rejected under §112, second paragraph, as being indefinite for the reasons noted by the Examiner at pages 2 and 3 of the Office Action.

Additionally, claims 2-7, 10-15 and 17-18 were rejected under 35 U.S.C. §103(a) as being unpatentable over Barnhill et al, in view of Wright, Jr..

Applicants note with appreciation the interview courteously afforded the undersigned representative of the Applicants on April 4, 2007. All of the above rejections were discussed at the interview, and it was agreed that if the claims were amended as set forth herein, this would distinguish the claims over the teachings of the Barnhill et al and Wright Jr. references. At the interview, the Examiner differed making a commitment as to whether such an Amendment would be entered, subject to conducting an updated prior art search and reviewing the submitted Amendment to be sure that no issues were raised in the Amendment.

As discussed at the interview, claims 4 and 6 have been editorially revised to correct the grammatical informalities therein. Since claim 4 has been amended in the manner that the Examiner stated claim 4 was already being interpreted, despite the presence of the grammatical errors, the amendment to claim 4 does not raise any new issues. The amendment to claim 6 simply corrects the grammatical errors therein, and does not change the basic content of that claim. Therefore, neither of the amendments to claims 4 or 6 raises a new issue.

The basis for the rejection of claim 18 under Section 112, second paragraph was the inadvertent retention of the term "improved" therein. It was Applicants' intention to amend claim 18 in the same manner as claim 17, in order to cancel the

phrase including the word "improved." This change has now been made in claim 18, and since this removes the basis for the rejection under Section 112, this amendment does not raise a new issue.

As also discussed at the interview, and as argued in Applicants' previous response, a basic feature of the network and method disclosed and claimed in the present application is the recognition that, when clinical studies or other types of studies involving markers having multiple sensitivities are undertaken, a large amount of data results that may, at the time of the study, be used only to evaluate the results with respect to one, or only a small number, of the markers in question. Nevertheless, since the biochips have multiple sensitivities, the data relating to the "unused" sensitivities will still exist, and will be available in an appropriate data base.

In accordance with the present invention, in the network and method of claims 17 and 18, this previously unused data is evaluated to determine if any previously unknown correlation exists with at least one further biomolecular marker, among the multiple biomolecular markers for which the biochip is sensitive.

Therefore, in the context of the present invention, it is not known in advance whether this additional correlation exists, but such a correlation, if it does exist, can be identified in a follow-up evaluation by having knowledge of other medical conditions of the patients that were originally tested.

In the example given in the present specification, wherein the biochip is originally used to test for cervical cancer, it may be the case that after the cervical cancer study is completed, a number of patients in the study may develop symptoms of a different medical condition, other than cervical cancer. If a number of such patients exhibit the same different medical condition, it is then possible to go back to

the previously-accumulated data regarding the other markers for which the biochip is sensitive, to identify (possibly) a correlation between the further medical condition and some other marker or markers that were among those for which data were acquired together with the cervical cancer data.

Each of independent claims 17 and 18 has been amended to use language consistent with these previously-made arguments, to state that a computerized evaluation is undertaken of all of the point of care raw data and all of the follow-up diagnostic data to identify a previously unknown correlation of at least one further biomolecular marker, among the multiple biomolecular markers, other than the biomolecular marker that was tested for the known correlation.

This is in contrast to the procedure disclosed in each of the Barnhill et al and Wright, Jr. patents. In both of those references, although data that was originally tested for one purpose may be subsequently tested for another purpose, the subsequent testing takes place using a known correlation, in order to see if some other medical condition corresponding to the known correlation exists. There is no teaching or suggestion in either of those references to evaluate the original data and follow-up data for the purpose of identifying a *previously unknown* correlation, i.e., to determine if this previously unknown correlation actually exists.

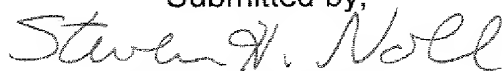
Support for these changes in claims 17 and 18 is present in the specification as originally filed at numerous locations, the most explicit being at page 9, lines 11 through 22.

As noted above, it was agreed at the interview that making these changes in the independent claims would preclude continued reliance on the Barnhill et al and Wright, Jr. references. Since these changes are consistent with Applicants' previous

arguments in support of patentability, and since the relevant prior art classifications have already been thoroughly searched, Applicants respectfully submit these changes do not raise any issues requiring further searching or consideration.

All claims of the application are therefore submitted to be in condition for allowance, and entry of the present Amendment and reconsideration of the application are therefore respectfully requested.

Submitted by,



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